# STATE OF NORTH DAKOTA BEFORE THE NORTH DAKOTA DEPARTMENT OF HEALTH ENVIRONMENTAL HEALTH SECTION, WATER QUALITY DIVISION

#### IN THE MATTER OF:

Proposed modification to North Dakota Pollutant Discharge Elimination System (NDPDES) permit no. ND-0026247 for the Devils Lake outlet. The permit modification request was to: (1) remove the time frame the outlet could operate, (2) remove or revise the total suspended solids (TSS) limit in the permit and (3) increase the 300-milligram per liter (mg/L) instream sulfate limit at the Bremen site.

On May 25, 2006, the North Dakota Department of Health (department) gave notice of a hearing seeking comment and testimony concerning a proposed NDPDES permit modification pursuant to the Devils Lake outlet project in Benson County, North Dakota, under the authority provided in North Dakota Century Code Section 61-28-04; and

A public hearing was conducted to receive comment and testimony on June 27, 2006, at Lake Region State College, Devils Lake, N.D.; and

The record of the hearing remained open for written comments on the proposed NDPDES permit modification through July 12, 2006, with written documents having been submitted into the record; and

Written or oral comments were submitted into the hearing record for department review. Public comments both supporting and opposing the Devils Lake outlet permit modification were presented; and

Comments in the record were evaluated by department personnel for applicability to the proposed permit modification with written response provided as appropriate.

Having considered the comments and testimony submitted to the record, the hearing officer makes the following:

### FINDINGS AND CONCLUSIONS

## **Jurisdiction**

1.0 The department has been delegated authority by the U.S. Environmental Protection Agency to implement the National Pollutant Discharge Elimination System (NPDES) as part of the federal Clean Water Act in the state of North Dakota. The department implements the NPDES under the authority granted in state law (NDCC 61-28) and rule (NDAC 33-16-01 and 33-16-02.1) which identify the limits by which discharges are permitted.

# **Findings**

- 2.0 The North Dakota Department of Health made the determination to modify the NDPDES permit based on receipt of new information. The specific conductance measurements at the Flora and Bremen gages were established during 2005. Prior to 2005, there were limited data available at the point of insertion. In the process of developing a relationship between specific conductance and sulfate concentration, it was recognized that the natural background levels for sulfate at the point of insertion were higher and more variable than known previously.
- 3.0 The water quality standard of 450 milligrams per liter (mg/L) in the Sheyenne River and 250 mg/L in the Red River of the North will not be exceeded as a result of the proposed permit modification.
- 4.0 The permit modification allows for a 15 percent increase above base conditions of sulfate in the Sheyenne River, not to exceed 450 mg/L. For example, if the sulfate concentration in the Sheyenne River upstream of the outlet were 300 mg/L, the maximum increase allowed would only be 45 mg/L above background. The natural background concentration near the point of discharge into the Sheyenne River periodically exceeds the numeric criterion for sulfate.
- 5.0 Antidegradation review was not required because beneficial use of the waters is not affected by the permit modification. The permit modification will not cause the concentration of any parameter of concern, including sulfate, to be exceeded by more than 15 percent.

- 6.0 Extending the discharge time frame will have no significant, permanent effect on the quality and beneficial uses of the water because the permit does not allow discharge under ice conditions.
- 7.0 There presently are no total suspended solids (TSS) stream standards for any classes of waters in North Dakota. The control of TSS in the outlet discharge is achieved primarily through proper design, operation and maintenance. As part of operation and maintenance, the permittee will be required to implement best management practices (BMPs) to control TSS and to continue sampling for TSS at the outlet structure. BMP requirements are more appropriate than numeric limits for controlling TSS in this discharge.

### RECOMMENDATIONS

The following recommendation is provided:

The Devils Lake outlet NDPDES permit modification should be approved as proposed.

Dated at Bismarck, North Dakota, this 16h day of August 2006.

L. David Glatt, Chief

**Environmental Health Section**